

Low Pulsation Dispensing Peristaltic Pump

3 years warranty

304
SS Housing



IF3

Features

Servo motor drive, high precision, low pulsation dispensing peristaltic pump.

The low pulsation pump head is special for high precision filling. Through the phase difference between the two sets of rollers, make the fluid peaks and valleys complementary, then reduce the pulsation of the fluid.

Adaptive pressure tubing space, extend the tubing lifetime effectively.

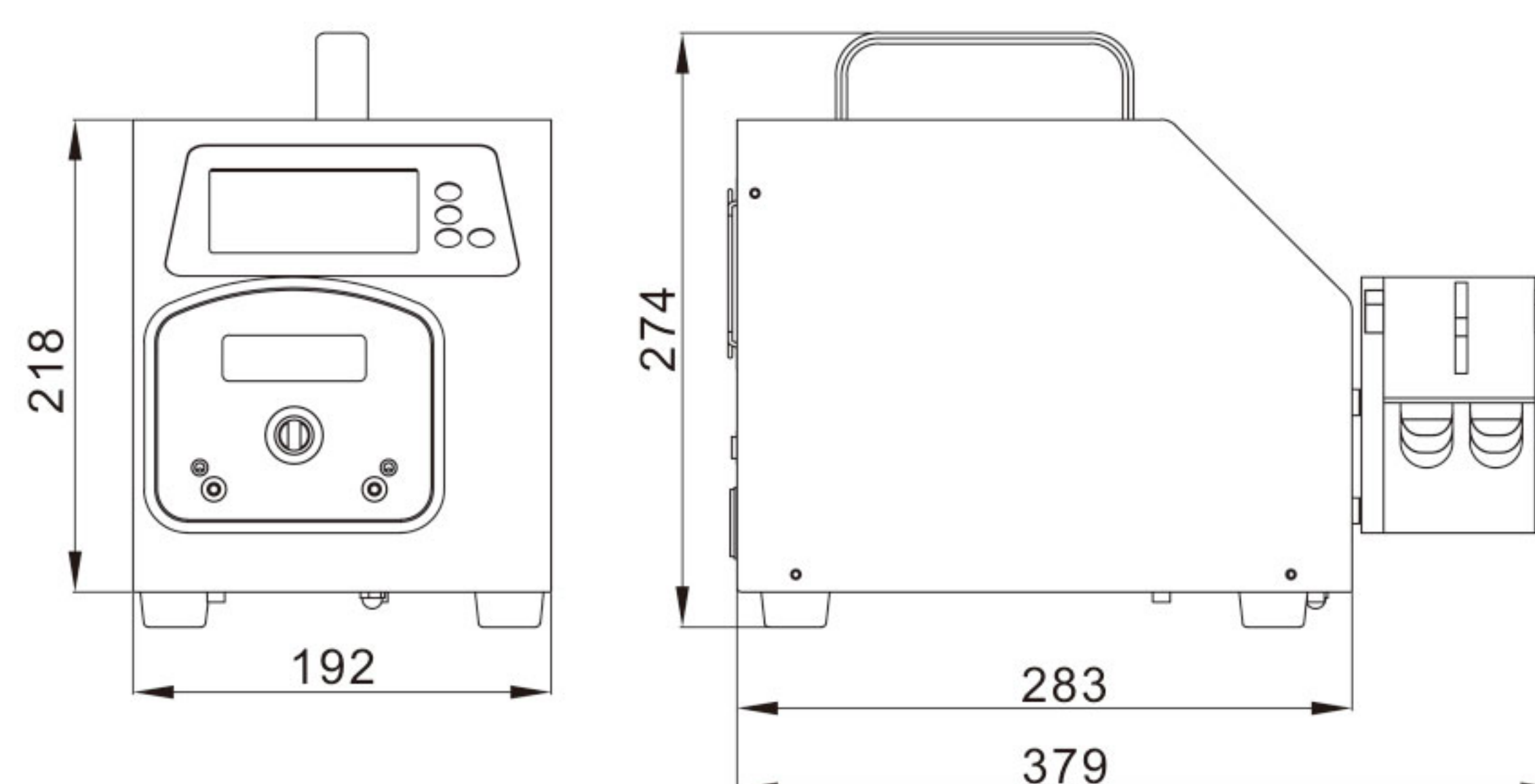
Achieving high precision dispensing of micro flow rate.

New flow rate mode, can be used for continuous transferring.

Can communicate with balance, closed-loop control.

Model Number | IF3

Dimension Drawing (Unit: mm)



Product Composition and Flow Rate Range

| Drive | Motor Type | Pump Head | Tubing | Speed Range(rpm) | Flow Rate(mL/min) |
|-------|-------------|-----------|-----------------------------------|------------------|-------------------|
| IF3 | Servo motor | DY15 | 13#, 14#, 19#, 16#, 25#, 17#, 18# | 1-350 | 0.1~3337 |
| | | DY25 | 15#, 24#, 35#, 36# | | 4.2~4340 |

Filling Volume Reference Parameter(Media is water)

| Tubing | Filling Volume | Filling Time | Actual Filling Volume(mL) | | | | | | | | | | Filling Accuracy | |
|--------|----------------|--------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------------------|-------|
| 14# | 0.5mL | 0.5s | 0.5003 | 0.5010 | 0.4982 | 0.5015 | 0.5015 | 0.5010 | 0.5014 | 0.5005 | 0.4981 | 0.4998 | -0.37% | 0.32% |
| | | | 0.5025 | 0.4983 | 0.5024 | 0.5021 | 0.5020 | 0.5004 | 0.5005 | 0.4997 | 0.4977 | 0.5008 | | |
| 14# | 1mL | 1s | 1.0037 | 1.0000 | 1.0026 | 1.0003 | 1.0031 | 1.0015 | 1.0000 | 1.0007 | 1.0023 | 1.0035 | -0.44% | 0.42% |
| | | | 1.0002 | 1.0020 | 0.9968 | 1.0010 | 0.9986 | 1.0026 | 1.0030 | 1.0029 | 1.0023 | 1.0017 | | |
| 14# | 2mL | 1s | 2.0020 | 2.0060 | 2.0039 | 2.0037 | 2.0047 | 1.9944 | 2.0062 | 2.0040 | 1.9951 | 2.0060 | -0.58% | 0.60% |
| | | | 2.0036 | 1.9940 | 2.0024 | 2.0086 | 1.9946 | 2.0005 | 1.9951 | 2.0068 | 1.9971 | 1.9965 | | |
| 19# | 3mL | 1s | 3.0058 | 2.9935 | 3.0092 | 3.0008 | 2.9927 | 3.0072 | 3.0046 | 2.9914 | 3.0040 | 3.0000 | -0.33% | 0.31% |
| | | | 2.9902 | 3.0048 | 3.0008 | 2.9919 | 2.9984 | 3.0012 | 3.0084 | 2.9915 | 2.9990 | 3.0051 | | |
| 16# | 5mL | 1s | 5.0215 | 4.9982 | 5.0145 | 5.0038 | 4.9864 | 5.0183 | 4.9962 | 5.0227 | 5.0158 | 4.9806 | -0.39% | 0.50% |
| | | | 5.0248 | 5.0070 | 4.9861 | 5.0108 | 4.9995 | 5.0080 | 5.0044 | 4.9868 | 5.0231 | 4.9977 | | |
| 25# | 10mL | 1s | 10.02 | 10.04 | 10.00 | 9.98 | 10.02 | 10.03 | 10.04 | 10.04 | 10.01 | 9.99 | -0.20% | 0.40% |
| | | | 10.00 | 10.02 | 10.02 | 10.04 | 9.99 | 9.98 | 10.00 | 10.04 | 10.02 | 10.03 | | |
| 25# | 15mL | 1s | 15.02 | 14.97 | 14.97 | 14.94 | 15.00 | 15.00 | 14.94 | 14.95 | 14.96 | 14.99 | -0.47% | 0.13% |
| | | | 14.96 | 14.95 | 14.96 | 14.99 | 14.98 | 14.94 | 14.93 | 14.93 | 14.98 | 14.96 | | |
| 17# | 30mL | 1s | 29.92 | 30.01 | 29.99 | 29.91 | 29.83 | 29.86 | 29.91 | 29.91 | 29.91 | 29.89 | -0.57% | 0.20% |
| | | | 29.88 | 29.96 | 30.03 | 30.06 | 30.02 | 30.02 | 30.06 | 29.96 | 29.96 | 29.83 | | |
| 18# | 100mL | 2.5s | 99.80 | 99.90 | 99.80 | 99.90 | 100.00 | 100.10 | 100.10 | 100.00 | 100.10 | 100.00 | -0.20% | 0.30% |
| | | | 99.80 | 100.00 | 100.10 | 100.20 | 99.90 | 100.10 | 100.00 | 100.30 | 100.10 | 100.10 | | |
| 15# | 10mL | 1s | 9.97 | 10.01 | 9.96 | 9.98 | 10.01 | 9.96 | 9.97 | 9.99 | 9.96 | 9.96 | -0.60% | 0.10% |
| | | | 10.00 | 9.94 | 9.97 | 10.00 | 9.96 | 9.97 | 10.00 | 10.00 | 10.01 | 9.97 | | |
| 24# | 30mL | 1s | 29.90 | 29.80 | 30.10 | 29.90 | 29.90 | 30.00 | 29.90 | 29.90 | 30.00 | 29.90 | -0.67% | 0.33% |
| | | | 29.90 | 29.90 | 29.90 | 29.90 | 29.90 | 29.80 | 30.00 | 29.90 | 29.90 | 30.00 | | |
| 35# | 70mL | 1.2s | 69.80 | 69.90 | 69.90 | 69.90 | 69.70 | 70.10 | 70.00 | 69.70 | 69.90 | 69.90 | -0.43% | 0.43% |
| | | | 69.90 | 70.10 | 70.00 | 69.90 | 70.30 | 69.70 | 70.10 | 69.70 | 69.70 | 69.90 | | |
| 36# | 100mL | 2s | 99.80 | 99.90 | 99.80 | 99.80 | 100.00 | 99.90 | 99.90 | 99.90 | 99.90 | 99.90 | -0.20% | 0.10% |
| | | | 99.80 | 99.90 | 99.90 | 99.90 | 100.00 | 100.10 | 99.80 | 100.10 | 99.90 | 99.90 | | |



Low Pulsation Pump Head

DY15, DY25



Product Introduction

The 'low pulsation' pump head is specialized for high precision filling. Through the phase difference between the two sets of rollers, make the pulse crest and trough complementary, reducing the fluid pulsation effectively, reach high precision liquid transferring.

Model Number

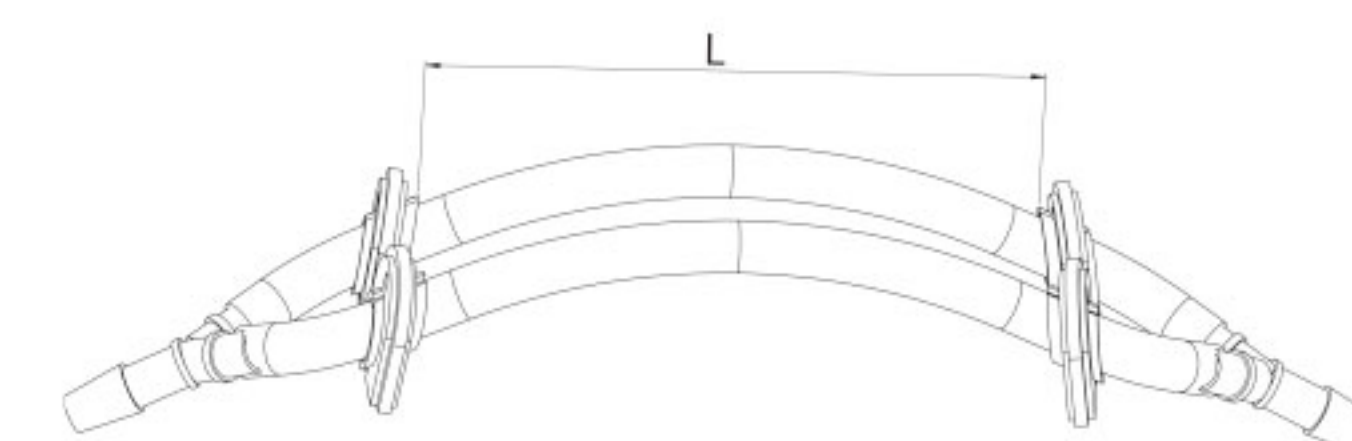
| DY15, DY25

Typical Application

High precision dosing micro liquid.

"Y" connector and tubing cartridge schematic diagram

The tubing length is 125mm between two cartridges



Tubing Installation Procedure

1. Lift both side levers, take off the upper block.



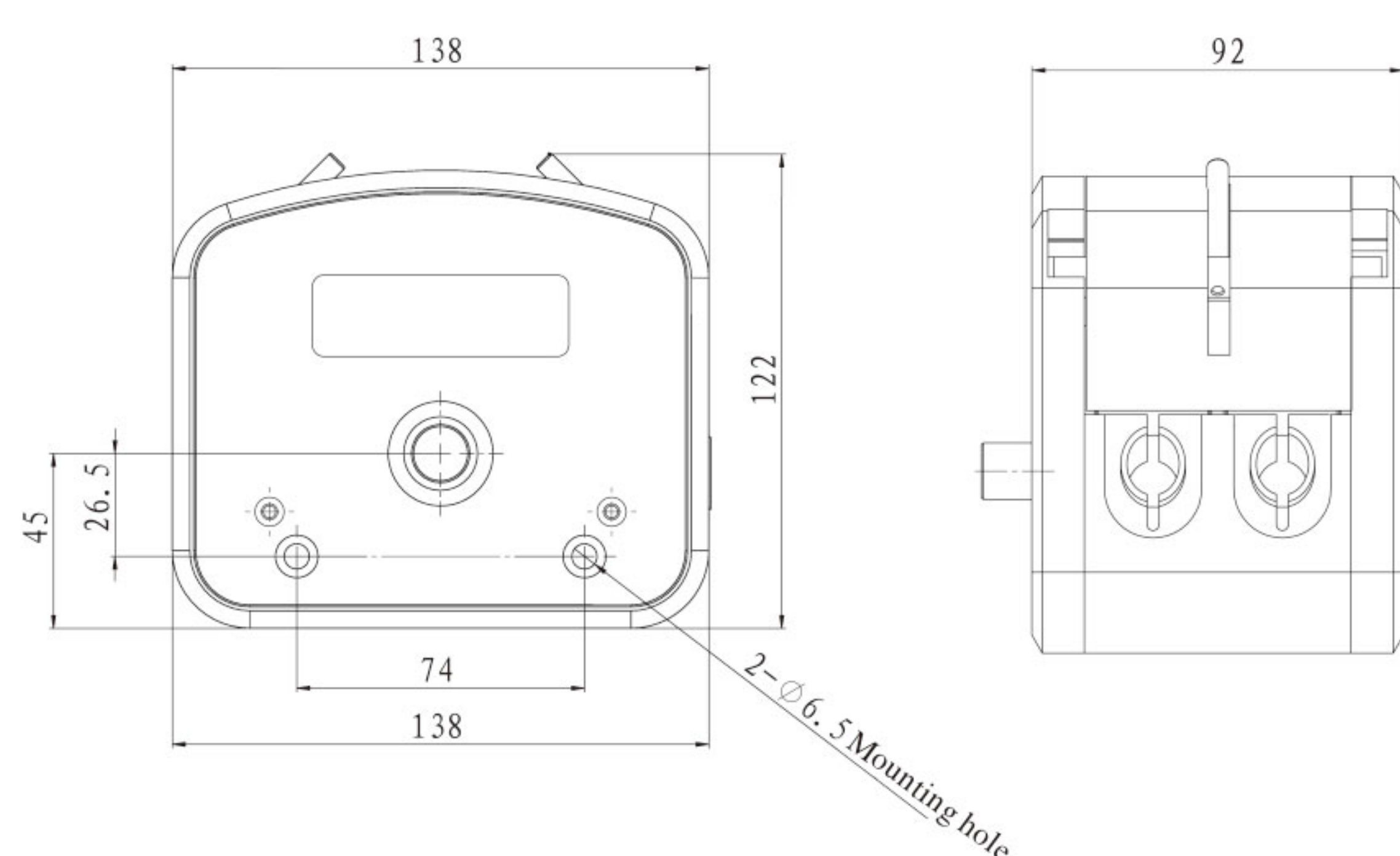
2. Put the tubing with tubing clamp into pump housing.



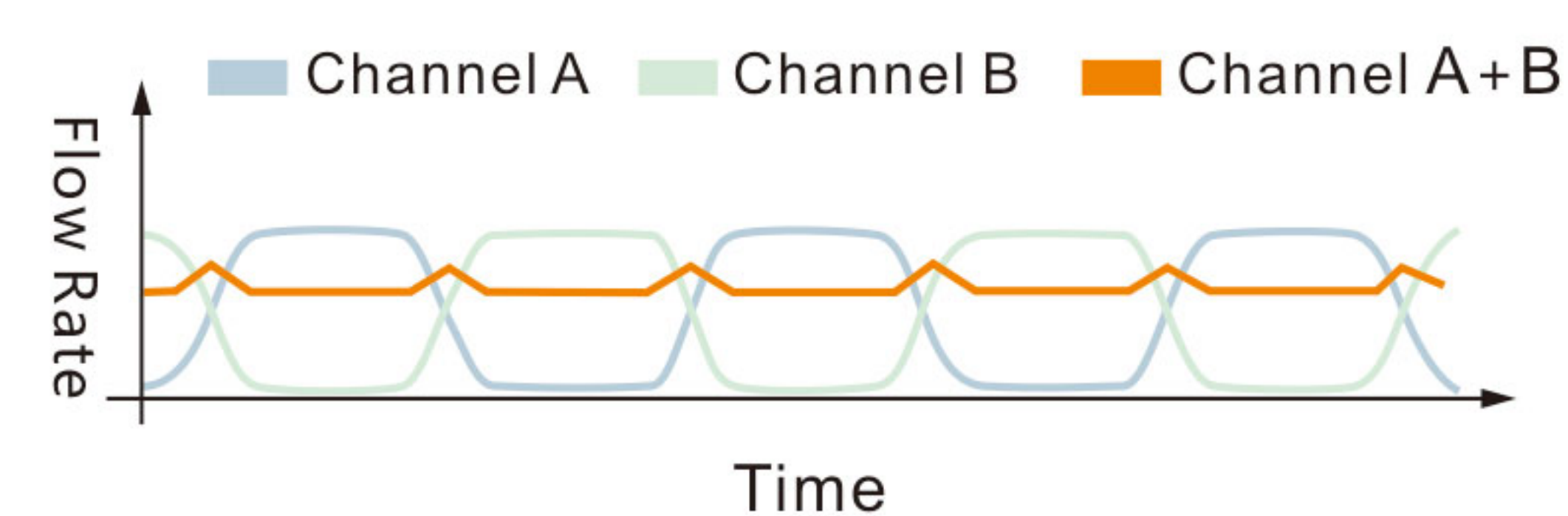
3. Install the upper block, put down the levers to lock the block.



Dimension Drawing (Unit: mm)



Pulsation Reduction Schematic Diagram



Technical Specifications

| Model No. | Housing Material | Tubing Clamp Material | Tubing | | Flow Rate (mL/min) (0.1~350rpm) | Weight (kg) |
|-----------|------------------|-----------------------|-----------------|---------------------|------------------------------------|-------------|
| | | | Tubing Sizes | ID × Wall Thickness | | |
| DY15 | Aluminum alloy | PP | 13 [#] | 0.8 × 1.6(mm) | 0.01~48 | 3.2 |
| | | | 14 [#] | 1.6 × 1.6(mm) | 0.06~223 | |
| | | | 19 [#] | 2.4 × 1.6(mm) | 0.13~448 | |
| | | | 16 [#] | 3.1 × 1.6(mm) | 0.2~723 | |
| | | | 25 [#] | 4.8 × 1.6(mm) | 0.47~1626 | |
| | | | 17 [#] | 6.4 × 1.6(mm) | 0.64~2230 | |
| DY25 | Aluminum alloy | PP | 18 [#] | 7.9 × 1.6(mm) | 0.95~3337 | 3.2 |
| | | | 15 [#] | 4.8 × 2.4(mm) | 0.42~1480 | |
| | | | 24 [#] | 6.4 × 2.4(mm) | 0.76~2670 | |
| | | | 35 [#] | 7.9 × 2.4(mm) | 1~3600 | |
| | | | 36 [#] | 9.6 × 2.4(mm) | 1.24~4340 | |

